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“The Impact of Online Ratings on Video Game Sales”

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Abstract

Online third-party reviews have been grown over the last decade and they now play an important role as a tool for helping customers evaluate products and services that in many cases offer more than tangible features. This study intends to quantify the impact online ratings have over video game sales by conducting a linear regression analysis on 300 titles for the previous console generation (PlayStation® 3 and Xbox® 360) using a data from the video game industry to understand the existing influence on this particular market. The findings showed that these variables have a weak linear relationship thus suggesting that quality of a title explains little the commercial success of a video game and instead this should cover a wider range of factors. Afterwards, we compare results to previous ones and discuss the managerial implications for upcoming gaming generations.

Keywords: Video games, online reviews, online marketing, eWOM.

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Introduction

People like trusting others, especially when it comes down to brands they have not tried out themselves. After all, what could be better than a sincere advice from someone who had experienced the product or service you are interested on? This is the main concept behind online reviews and with the rapid growth of internet it could explain its growing relevance over the recent years. Product-based conversations have migrated to online communities thus creating an ongoing flow of information based on one simple need: consumers are willing to invest time and effort in order to obtain new and reliable insights beforehand the acquisition of a new product or the trying of a new service.

Online reviews work as a supplementary service for business-to-consumer communications and sometimes even substitute them; ideally online reviews satisfy consumers' information need for details beyond technical or physical attributes and so, they create a more educated audience that will apply a better judgement call over product purchases based on other users' experience. As result from this process there is a common belief that online reviews significantly influence consumers' purchasing decisions and therefore so many people consider them as a good proxy for overall perception of quality.

Some studies have found evidence supporting that idea, for example Godes and Mayzlin (2004) describe a positive relationship between online WOM and television show viewership. As a common conclusion among studies, findings suggest that many consumers use online information as main source to make offline purchase decisions. Some companies even intentionally shape online reviews in an effort to persuade consumers' purchase decisions (Dellarocas, 2006). However, these reviews could merely explain consumer preferences and do not necessarily forecast purchasing patterns (Li & Hitt, 2008). As we

summarize in Table 1, previous studies show that online product reviews can significantly influence consumers' decisions.

Table 1: Previous Studies on Online Product Reviews

Study	Data	Findings
Godes and Mayzlin (2004)	Television shows, 1999-2000	Online conversations offer one way to measure word of mouth.
Zhang and Dellarocas (2006)	Movies, 2003-2004	Critic's influence is more significant than previously suggested, especially on early weeks' box office revenue.
Liu (2006)	Movies, 2002	WOM information offer significant explanatory power for both aggregate and weekly box office revenue, especially in the early weeks after movie opens.
Chevalier and Mayzlin (2006)	Books, 2003-2004	Online amateur book ratings affect consumer purchasing behavior.
Dellarocas, Zhang and Awad (2007)	Movies, 2002	Online amateur movie ratings can be used as a proxy for word of mouth.

Source: "Zhu & Zhang, 2010"

After further study on the subject, we adopted a focus that could help us getting specific and accurate results. We developed a conceptual background that explains the importance online ratings and video game sales have on today's ever evolving online environment and hypothesized that - higher rankings lead to better sales – with the help of publicly available data sets obtained online we found that online ratings have a weak linear relationship with video game sales, challenging previous results.

We conducted a research with the main goal of measuring how much online ratings affected global sales for videogame titles released during the previous home consoles generation (7th: PlayStation® 3 and Xbox® 360) and contributing to the common knowledge of the topic in terms of managerial implications for managers that have paid

attention to these particular aspects of the business as a possible leverage for enhancing sales performance.

In the following sections we developed the paper through the next structure: First, we explained the idea of “Word Of Mouth” communications and its evolution to present days, deriving in online reviews. Then, we briefly described the video game industry and pointed out its relevance on the entertainment economy. Later on as we described the research objectives, we explained the methodology followed in this study. Next, we interpreted the result as we concluded our analysis on the available data. Later, we discussed managerial implications of the results. And lastly, we detailed this research limitations and proposed ideas for further research.

Conceptual Background

Traditional Word-of-Mouth

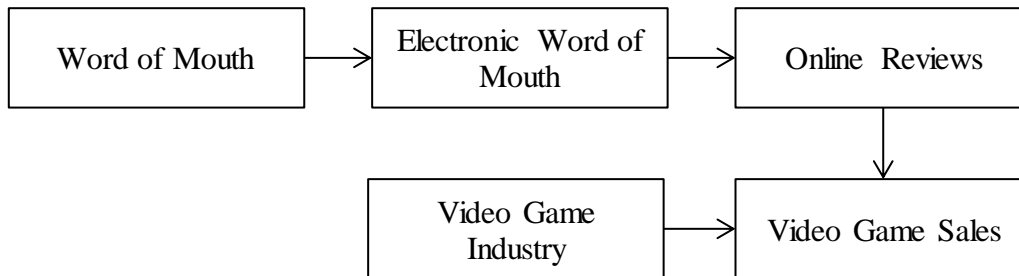
Word-of-mouth (WOM) is defined as the “spoken communication as a mean of transmitting information”¹, making it probably the simplest way of orally expressing an opinion and is primarily practiced in an informal and person-to-person context. Traditionally WOM represents an important weight on people’s mind and it has been acknowledged for many years as a major influence on what people know, feel and do (Arndt, 1967).

Nowadays many modern marketers are becoming more interested on developing a deeper understanding on the WOM effect (Nail, 2005). Among the pioneer researchers on this topic, Ernest Dichter (1966) in his Harvard Business Review study identify four key actors

¹ Oxford Dictionary

that are motivating people to embrace the WOM behavior: perceived product-involvement, self-involvement, other involvement and message involvement.

Figure 1: Conceptual Background



Source: Own development based on Conceptual Background structure

Several investigations followed this study and contributed to this model. Perhaps Sundaram, Mitra and Webster (1998) conducted the most notorious investigation in which they identify up to eight (8) major motivation factors to justify WOM behavior on people: altruism, product involvement, self-enhancement, helping the company, negative WOM altruism, anxiety reduction, vengeance and advice seeking; these factors make out of WOM a both individual and social behavior.

Summing up several studies, it has been concluded that word of mouth has a much bigger impact on consumers than other ways of marketing communications (Day, 1971), especially when is aligned with the receiver's knowledge (Laczniak, DeCarlo & Ramaswami, 2001) or when the consumers have had interactions with the product or brand (Bone, 1995; Herr, Kardes & Kim, 1991). WOM is becoming much more powerful than ever before, with new ways and channels for transmitting information, opinions are reaching places that were not available before.

Electronic Word-of-Mouth

Different from traditional WOM, Electronic Word-of-mouth (eWOM) communications take place in a more complex framework involving an online network within a computer-mediated setting such as, weblogs (tumblr.com), discussion forums (zapak.com), review websites (Epinions.com), retail websites (amazon.com), social networking sites (facebook.com), etc. Electronic-WOM usually occurs between participants engaging conversations with an online community of users with little or no prior relationship.

Having anonymity leads consumers to feel more comfortable in sharing their opinions, criticism and suggestions without revealing their identities (Goldsmith & Horowitz, 2006). Also, the relationship and interaction between online communities and their members substitute the relationship between individuals in assessing the influence of eWOM (Brown & Lee, 2007). People or users forming these communities join together due to shared interest on specific topics or products and trade information and opinions.

According to Kozinet (1999), information published via virtual communities is closely related to the success of a product or a service. Because eWOM involve a multi-way exchange of information (Dellarocas, 2003) and theoretically this information will be available forever to an infinite number of receivers (Godes & Mayzlin, 2004), numerous studies have been conducted to understand its reach and relevance, both at psychologically and marketing levels and have produced interesting mixed results.

In an experiment performed over two internet major book retail sites (Amazon.com and Barnesandnoble.com) consumers were exposed to several reviews, it was found that customer WOM affected purchasing behavior and positive book reviews led to an increase

in the relative sales of that site (Chevalier & Mayzlin, 2006). While some studies agree with these results (Ghose and Ipeiroitis, 2006), others suggest their influence is unimportant (Chen, Wu & Yoon, 2004) or context-dependent (Li & Hitt, 2008; Schindler & Bickart, 2012). It is important to understand that nowadays with the penetration growth of internet into new regions and with increasing online interactions within social media, eWOM it is turning into a powerful tool to communicate with consumers.

Online Reviews

Online reviews are a type of information that is defined as peer-generated assessments of a product based on their personal usage experience found on a company or third party websites (Chen & Xie, 2008). These assessments can be represented on a point scale rating or in the form of numerical stars depending on the website that they are posted. Regardless of the scale system, online reviews represent a component in people's purchasing decisions and open never-ending discussion about products or services.

Presence of online reviews has the potential to attract consumer visits and increases time spent surfing the website, also studies have shown that they improve customer perception of the website's usefulness (Kumar & Benbasat, 2006). Product reviews have become such an influential channel (Keller, 2007) that some firms choose to pay websites like Amazon.com for posting customer reviews on their websites (Mudambi & Schuff, 2010).

Consumers are using information found online to make purchasing decisions (Vollmer & Precourt, 2008) because it helps them form an unbiased understanding of the product for making an accurate choice with the proper criteria for evaluating a product or service. Decreasing the costs to access reviews for customer can create a source of differentiation,

adding value to customers that are willing to develop trust on a specific domain. Recently, marketers are including online reviews on their marketing mix as a technique to exercise a powerful influence over consumer choice (Gerzema & D'Antonio, 2011)

The Video Game Industry

Back on November 2013, Grand Theft Auto V sold approximately 11.2 million copies and generated more than USD \$ 800 million 24 hours after its release². Three days later it became fastest selling entertainment product in history and eventually broke several other records. The title was critically acclaim, even considered as a “masterpiece” for some reviewers for its quality and won many awards around the globe during the following months making it almost irresistible for players to obtain the product that everyone was talking about.

The video game industry comprises the development, marketing and sales of electronic video games and it has become a strong engine for economic growth, generating more than \$21 USD billion in revenue as of 2013 solely in the U.S. and employed around 140,000 people around the globe according to The Entertainment Software Association (ESA) in 2014. Today's worth of the industry is around \$ 65 USD billion according to Forbes³, nearly doubling the total global box office \$ 35 USD billion worth for the Motion Picture Industry⁴.

The “Video Games in the 21st Century: 2014 Report” by ESA detailed the relevance of the Gaming Industry within the U.S. economy; the real annual growth rate of the U.S. video game industry was 9.7% between 2009 and 2012. During this same period, real growth for

² IGN.com

³ Forbes

⁴ Motion Picture Association of America

the U.S. economy as a whole was 2.4%. The report also included some interesting figures: 59% of U.S. citizens play video games and 51% of U.S. households own a video game console. In contrast to general believe, the average game player is 31 years old and 48% of the users are female.

Over the last couple of years, a revolution in gaming has been changing the eldest habits of the industry; with independent developers producing games for different gaming and social platforms that are looking forward to include a wider variety of audience than ever before. A clear proof can be seen on the smartphones and tablets software industry where games such as, “Candy Crush” and “Angry Birds” had a leading role or in Facebook games like “Farmville” that created revenues over \$ 1 USD Billion in a time period of 3 years⁵.

With an average selling price of \$ 38.36 USD for console video games at the end of 2007, consumers are willing to invest time and effort on identifying video games that are worth paying for according to their preferences, so it is important to mention that ratings of any kind are important to consumers and their purchase intentions. Therefore, it is not surprise that Gamespot.com, an online and offline video game retailer chain is consistently ranked among the top 100 most popular Web sites in the United States according to web traffic and ranking website Alexa.com.

During the last year 2014, the ESRB provided ratings to 1,070 games including downloadable video games and mobile games for iOS and Android and a recent research estimated that 88% of parents believe that the ESRB rating system is either very or somewhat helpful in choosing games for their child (ESA, 2014) suggesting that online reviews and online ratings are a matter of study, since it can be influential to consumers.

⁵ Tech2

We focused this study strictly to games developed for Sony's PlayStation® 3 and Microsoft's Xbox® 360 for the next reasons: Firstly because these consoles have reached the final stage of their life cycle and are now being replaced by Next or current Generation of consoles (PS4 and Xbox One). Second, the reviews and sales data is openly available to the public and the video game library for these systems is big enough to perform a proper analysis (unlike current-generation). And third, because both PlayStation® 3 and Xbox® 360 positioned themselves as rivals in terms of target segments, making most games to be developed for these two platforms.

Methodology

Research Objectives

We consider that studying a factor that could help products be commercially successful is an important topic for further research hence we will try to determine in a measureable way if this aspect could represent a major leverage in sales. We hope to make a significant contribution on the topic of consumer behavior with this analysis that could result on further understanding which type of information consumers value the most.

The goal of this study is to measure the impact online ratings have over video game sales by quantifying the correlation these variables have with the assistance of a linear regression analysis using secondary data obtained from online resources (further explained in the next section) on a sample of 300 video game titles in order to understand how important online ratings are in the commercial success of video games and if indeed consumers are looking for getting the most out of their investments by acquiring the best possible product. To assess this influence we proposed the following research hypothesis:

H1: Video games with higher ratings will achieve higher global sales.

Another inherent objective to this analysis is to describe other possible relevant factors that might impact the commercial success of some titles.

Data Description

In the pursuit for more accurate and reliable results, we conducted this study with secondary data collected from two existing and publicly available datasets: a) Sales figures were extracted from website www.vgchartz.com which includes statistics from different regions per game and; b) Online ratings were gathered from the website www.ign.com. This website is continuously releasing professional reviews on new games and publishing articles and discussion forums about popular video game topics.

Sales Data

VGChartz is the center of a video game sales tracking network of five video game websites - VGChartz, gamrFeed, gamrReview, gamrTV and gamrConnect providing regular sales figures (weekly, monthly, yearly) of both console software and hardware distributed by region. This site provides tools for worldwide data analysis and regular written reports based on major news of the video game industry. Figures for sales are based on estimates extrapolated from small retail samples⁶ and results are often compared to the ones published by NPD Group (ranked 10th among the top 25 market research companies in the U.S.)⁷. Table 2 displays the all-time top 10 best-selling video games titles from the console and handheld console gaming industry.

⁶ VGchartz.com

⁷ American Marketing Association

Table 2: Best-Selling Video Games

Pos	Game	Platform	Year	Genre	Publisher	Global Sales (millions of units)
1	Wii Sports	Wii	2006	Sports	Nintendo	82.42
2	Super Mario Bros.	NES	1985	Platform	Nintendo	40.24
3	Mario Kart Wii	Wii	2008	Racing	Nintendo	35.17
4	Wii Sports Resort	Wii	2009	Sports	Nintendo	32.63
5	Pokémon Red / Green / Blue Version	GB	1996	Role-Playing	Nintendo	31.37
6	Tetris	GB	1989	Puzzle	Nintendo	30.26
7	New Super Mario Bros.	DS	2006	Platform	Nintendo	29.67
8	Wii Play	Wii	2006	Misc	Nintendo	28.89
9	Duck Hunt	NES	1984	Shooter	Nintendo	28.31
10	New Super Mario Bros. Wii	Wii	2009	Platform	Nintendo	27.97

Source: VGChartz.com

Video Games Online Ratings

Because reviewing games is the main business of www.ign.com they focus on offering a critical view of how a game succeeds or fails at what it is trying to do⁸, and provides all the info needed to determine if a game is worth the time and money to users. According to online traffic monitor website Alexa.com, as of April 2015 www.ign.com was featured among the top 150 most visited websites (116th place). Reviews are submitted online on both written and video format close to a title's release date, making it source for information novelties.

Procedure

Based on the datasets previously described, we constructed a simple linear regression model to analyze the relation between these two numerical variables (online ratings and video game sales) and we measured how much one impacts the other. In other words, the model will try to explain how correlated are the online ratings to sales figures for this specific video game generation.

⁸ IGN.com

One of the first challenges at the initial stage on this procedure was defining the numerical value for online ratings on video game titles that were released on both platforms. For solving this situation, we averaged ratings between both consoles; since they usually differ in less than 0.3 points it is safe to assume that this procedure will not impact significantly the analysis. Following our assumptions, we treated sales figures as cumulative; adding numbers from both consoles when it was needed case and using the result as total figure.

For constructing the regression model, we first collected a sample from the main data set⁹ following these parameters: Margin of error of 5% and a confidence level of 95%. With these parameters and according to the Sample Size Table¹⁰ (See Appendix A) we obtained a sample size of 291 which was rounded up to 300 for better results. Following, we randomly extracted 300 titles out of the main data set by using Excel's functions. First we assigned 300 random values using the function *RANDOM*, then we linked the numbers to a formula containing *HIERARCHY* and *COUNT.IF* that would ensure us no entry was repeated, and finally we matched the result with *VLOOKUP* to obtain the title name and sales data. Afterwards, we manually added ratings for each title from the online ratings website www.ign.com and at last we applied conditional formatting for double checking on duplicates.

Afterwards, with a well-defined and ready to use sample we entered the inputs into IBM SPSS® Software to create a model that would represent the correlation among all the sample entries using the simple linear regression function with the variables previously described. As stated earlier, the independent variable "IGN_Rating" was inserted into the

⁹ built with over 1,200 video game titles from www.vgchartz.com

¹⁰ The Research Advisors

variable input, followed by the dependent variable “Global_Sales” and thus, we conducted the linear regression analysis to obtain the final results with the same parameters used for collecting the sample: Margin of error of 5% and a confidence level of 95%.

Results

This section is intended to explain our analysis conducted on the data and so, the model output is complemented with the interpretation of these results.

Table 3: Summary Statistics for the sample

Variable	Mean		Std. Deviation	Min.	Max.
	Statistic	Std. Error			
IGN_Rating	7.2290	0.0937	1.6245	1.00	10.00
Global_Sales	1.6105	0.1776	3.0755	0.01	26.70

Source: SPSS

The summary statistics for the titles used on the sample are shown in the Table 3 and it shows slightly favorable positive ratings for video games (7.23/10). Nevertheless, numbers for sales could be considered as ambiguous because even though with a considerably positive mean of 1.6105 (USD million), the range on the sample is significantly large and, aligning it up with the information on development costs in this industry (previously described), it is safe to assume that results are fairly less favorable than what results might suggest.

Table 4: Model Summary

Regression Statistics				
Multiple R	R-Square	Adjusted R-Square	Standard Error	Observations
0.36915	0.13627	0.13337	2.86308	300

Source: SPSS

Based on the regression analysis we computed with SPSS, the correlation coefficient (R) which measures the strength of a linear relationship of the two variables used for this study is 36.9%, meaning that there is a weak positive linear relationship between them and that there are likely other factors explaining the variability between sales and video game ratings. Following, R-squared or the determination coefficient which explains how close is the data to the fitted regression (a linear model in this case) resulted in a value of 13.6%, indicating that the model explains very little the variability of the response data around its mean. However, with the R-squared value explaining that 13.6% of video game sales movements can be explained solely on the rating factor, it can be considered that this value is significantly relevant. Table 4 contains the results for the regression statistics.

Additionally, from the ANOVA analysis we built a formal model with the coefficients summary, displayed on Table 5: $Y = -3.44 + 0.69x$. Where Y stands for the dependent variable (or sales) and the x represents the rating each title has. This is a representation for sales predictions based on the analysis earlier described. Nonetheless, due to the fact that the R-square or the determination coefficient was significantly low this might not be relevant for an accurate forecast.

Table 5: Coefficients Summary¹¹

Model		Coefficients	Std. Error	t	Sig.	Lower 95%	Upper 95%
1	(Constant)	-3.442	0.755	-4.558	0.000	-4.928	-1.956
	IGN_Rating	0.699	0.102	6.857	0.000	0.498	0.899

Source: SPSS

¹¹ According to the information shown on the tables, this analysis shows that the significance level or p-Value (0.000) is below the 0.05 confidence value set for this test therefore, the hypothesis is rejected.

Relying upon all the information available from the conducted analysis, these results suggested that the variables measured – online ratings and video games sales - are weakly linked to each other even though ratings are considered important for the video game consumers. However, after obtaining the numerical results from the analysis we concluded that critically acclaimed video games do not explicitly mean commercial success as of sales figures.

Discussion

The way information connects people nowadays has evolved towards new channels, it starts at one point and then spreads into different directions reaching people through diverse platforms. It has accomplished an unprecedented diffusion speed and generated higher website traffic with the help of a wide variety of social networks and media that communicate opinions openly to the public, express ideas and transmit information to consumers through websites, blogs, online magazines and YouTube subscriptions.

Once obtained the outcomes of this research, the main issue remains as how relevant are the ratings for consumers when purchasing products reviewed online. Unlike other previous studies focused on the helpfulness of reviews (Mudambi & Schuff, 2010), characteristics of the reviews – average, number and variation of ratings (Zhu & Zhang, 2010), length, posting date and rating (Chevalier and Mayzlin, 2006); the main purpose of this report is to measure the direct relation between global sales of video game titles and their respective ratings on www.ign.com. Therefore we have a different interpretation of results while using similar data.

Even though online ratings play a big role as a eWOM diffuser and there is evidence that have a significant impact on sales elasticity (Floyd, Freling, Alhoqail, Cho, Freling, 2014) or that affects majorly less popular and online games (Zhu & Zhang, 2010) depending on the type of product that is being sold, experience goods in this case (Mudambi & Schuff); findings on this experiment suggest different interpretations. With a weak linear relation between variables, higher ratings do not necessarily mean higher sales although it is likely that this relation is more complex than the direct association analyzed here on this study.

Additional evidence supporting that ratings are not an outstanding factor for commercial success of video games are needed for better understanding the relationship between sales and online rating (Other than the ones presented here). However, considering the extent of factors that could lead a product for achieving great sales figures, especially within the entertainment industry where there is a constant promotion of new and innovative products, having ratings accountable for a 13% should encourage developers to still invest resources into producing quality products.

In the video games industry some titles have achieved major sales figures depending on diverse set of factors other than performance reviews such as, marketing and advertising campaigns, successful prequels, life events (films, sports events) and bundling techniques with new technologies. Acknowledging that several reasons could affect sales, other than the product itself should lead to adjustments. Firms' marketing strategies need to be developed specifically and tailored accordingly to match each product with the goal of assembling a unique marketing mix that could benefit them better.

Managerial Implications

Based on the findings obtained from this research, we found a significant number of possible managerial implications from which we considered four major areas for managers to pay special attention focusing on the current and upcoming trends for the Video Game Industry which entails technological challenges: Digital marketing, customer relationship management, digital distribution and project management.

Nowadays many innovative products are sold primarily online (video games included) and buyers are more likely to obtain information from online sources available across the internet. For such reason it is critical that products are not only advertised properly but also placed better, by reducing search costs firms could create more benefits to potential buyers and also enhance their online experiences, generating preferences. This concept for cost reduction goes beyond search engines placements and instead could mean a more direct form of contact with the end user or the correspondingly target market.

Establishing a direct relationship with consumers is an imperative strategy for technological products in order to grow audience and stay relevant; especially with so many tools and available platforms for reaching consumers in the best possible way, which now has shifted towards visual concepts through social media. This direct contact displays a possibility to know consumers better thus offering products accurately align with their preference with the help of technology by creating online profiles based on search history.

Reaching consumers while adding value to the online experience can be achievable through designing mobile friendly content and search optimization, taking advantage of our collective addiction towards handheld devices, therefore, incorporating mobile marketing a

as a tool for success. This notion could be expanded into social platforms and other communities in which buzz generated by the introduction of a product results into building anticipation for attracting potential consumers.

With the recent transition going on in the Video Game Industry that distribution is shifting towards digital platforms, thus bypassing traditional retailers it is clearly an opportunity for new firms to embrace technological changes as an advantage. Previously distribution was built around the relationship between developers and publishers but these shifts can portray a reduction of production, distribution and storage costs hence stimulated small producers to create products that were not commercially feasible.

Another parameter playing a big role on successful sales for videogame titles is the budgeting; each firm allocates a certain amount of money depending on the project's forecasted objective. For some companies developing video games, costs could go up to USD \$ 10 million (or higher) placing the company in a tight spot where if the title does not achieve high figures on sales it is considered a fail. That is where advertising and marketing campaigns play their roles. On the other hand, some titles are developed with minor costs and modest marketing budgets to achieve levels of profitability for the firm.

It is highly recommended for firms to align general management closely to the project's aspiration thus the company benefits better from understanding the influence that online reviews have; and to translate the weight they have on the consumers' purchase decisions into a crucial advantage for firms embracing online WOM as a channel for broadcasting informational aspects about their products. Allocating resources and effort into managing

online information and WOM diffusion could transform into better sales for firms investing on maintaining good online presence.

Limitations and Future Research

While this research has tried to demonstrate the influence of ratings over sales using real life data and achieved results that could lead to further studies, there are some limitations that might have diminished the accuracy of outcomes, leaving unanswered questions that other way could have assist this study to obtain better results.

This current work has limited the results concerning ratings over sales in the next ways: First, sales figures from the vgchartz.com are merely estimations computed by the firm members which can severely impact results and interpretations from the analysis conducted in this research. Secondly, even though IGN.com is a highly transited website in the U.S., there is no proof that the regional websites are as influential as the main domain. Third, this study implies that buyers are aware of the product in advance of the purchase, either by own research or by any other mean and are willing to obtain the best product for the price. It is also important to consider that another important limitation for this study was the time in which this study was conducted.

As result of these limitations and in pursuit of more accurate results for further studies, here are presented possible extensions to this study: It is suggested that researchers try to determine in which geographical region online ratings weight more in the decision to buy video game titles, following ratings as a guide. Another possible suggestion for further study might include a research on how successful video games spend their money versus how they are rated, including budgets for marketing, research and advertising. And lastly,

further studies could replicate this study structuring results into periods to determine how much the effect online ratings have over sales has changed over years.

Conclusion

Currently there is an ongoing “battle” happening in the online communications world over who has the most readers, fans, likes or shares which eventually are measured as who reaches more people in an interesting yet valuable way or who has the opinion that fits best to what some consumers are looking for. This attractive virtual world embraces online communities as platforms for communications and also as a way of profitability, making it a business model especially appealing for heavy-internet users.

Even though video gaming is a \$ 21 USD billion industry there is a shortage of clear knowledge about which are the motivators that encourage people to acquire products. For such reasons and in the light of results, we believe that nowadays exists an imperative need to further understanding and to conduct predictive studies of behaviors and patterns that could optimize development, sales and services inside this industry.

Based on the knowledge of this industry’s aggressive marketing campaigns and how trends are shifting towards more technological advance features, we recommend developers to further explore innovative approaches to attract new segments. Our study hereby presented shows that consumers do not purchase products only by its rating. Overall, this paper contributes to the literature by adopting a different approach to previous research.

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Appendix A

Required Sample Size [†]								
Population Size	Confidence = 95%				Confidence = 99%			
	Margin of Error				Margin of Error			
	5.0%	3.5%	2.5%	1.0%	5.0%	3.5%	2.5%	1.0%
10	10	10	10	10	10	10	10	10
20	19	20	20	20	19	20	20	20
30	28	29	29	30	29	29	30	30
50	44	47	48	50	47	48	49	50
75	63	69	72	74	67	71	73	75
100	80	89	94	99	87	93	96	99
150	108	126	137	148	122	135	142	149
200	132	160	177	196	154	174	186	198
250	152	190	215	244	182	211	229	246
300	169	217	251	291	207	246	270	295
400	196	265	318	384	250	309	348	391
500	217	306	377	475	285	365	421	485
600	234	340	432	565	315	416	490	579
700	248	370	481	653	341	462	554	672
800	260	396	526	739	363	503	615	763
1,000	278	440	606	906	399	575	727	943
1,200	291	474	674	1067	427	636	827	1119
1,500	306	515	759	1297	460	712	959	1376
2,000	322	563	869	1655	498	808	1141	1785
2,500	333	597	952	1984	524	879	1288	2173
3,500	346	641	1068	2565	558	977	1510	2890
5,000	357	678	1176	3288	586	1066	1734	3842
7,500	365	710	1275	4211	610	1147	1960	5165
10,000	370	727	1332	4899	622	1193	2098	6239
25,000	378	760	1448	6939	646	1285	2399	9972
50,000	381	772	1491	8056	655	1318	2520	12455
75,000	382	776	1506	8514	658	1330	2563	13583
100,000	383	778	1513	8762	659	1336	2585	14227
250,000	384	782	1527	9248	662	1347	2626	15555
500,000	384	783	1532	9423	663	1350	2640	16055
1,000,000	384	783	1534	9512	663	1352	2647	16317
2,500,000	384	784	1536	9567	663	1353	2651	16478
10,000,000	384	784	1536	9594	663	1354	2653	16560
100,000,000	384	784	1537	9603	663	1354	2654	16584
300,000,000	384	784	1537	9603	663	1354	2654	16586

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